AF 1764 $

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of: Heiko PINTZ	:	
Appln. No.: 09/600,518	:	Art Unit: 1764
Filed: September 8, 2000	:	Examiner: WATCHEL, Alexis A.
For: TEXTILE GRATING	:	Docket No.: FRM-02601

CERTIFICATE OF MAILING

I hereby certify that the foregoing document is being deposited with the United States Postal Service as first class mail, postage prepaid, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on August 18, 2003.

Tracey A. Newell

Tracey A. Newell

TRANSMITTAL OF APPEAL BRIEF

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Applicant hereby submits the originally-signed Appeal Brief with Certificate of Mailing (in triplicate), check in the amount of $160.00, and postcard receipt for the above-referenced patent application.

08/20/2003 MBIZUNES 00000142 09600518

01 FC:2402 160.00 OP

Although we believe that we have appropriately provided for any fees due in connection with this submission, the Commissioner is authorized to credit any overpayment or charge any deficiencies to/from our **Deposit Account No. 031721**. Two originally-executed copies of this form are being submitted.

Should there be any questions after reviewing this paper, the Examiner is invited to contact the undersigned at 617-248-4038.

Respectfully submitted,
CHOATE, HALL & STEWART

August 18, 2003
Date

Donald W. Muirhead
Reg. No. 33,978

Patent Group
Choate, Hall & Stewart
Exchange Place, 53 State Street
Boston, MA 02109

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

CERTIFICATE OF MAILING

I hereby certify that the foregoing document is being deposited with the United States Postal Service as first class mail, postage prepaid, "Post Office to Addressee", in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA, 22313-1450 on August 18, 2003.

Tracey A. Newell

* * *

APPEAL BRIEF OF HEIKO PINTZ FOR TEXTILE GRATING

Application Serial No.: 09/600,518
Filed: September 8, 2000

Appeal from a decision of the Primary Examiner
dated February 25, 2003

REAL PARTY IN INTEREST

The above identified application is assigned to Huesker Synthetic GmbH & Co. by virtue of an Assignment recorded by the U.S. Patent and Trademark Office on September 8, 2000, at Reel 11080, Frame 0762.

RELATED APPEALS AND INTERFERENCES

Appellant is not aware of any appeals or interferences related to the above identified application.

STATUS OF THE CLAIMS

This is an appeal from a decision of the Primary Examiner in the Office Action dated February 25, 2003, finally rejecting Claims 1-23 in the above identified patent application. Claims 1-23 stand rejected under 35 U.S.C. 103(a). No claim has been allowed. A Notice of Appeal was submitted on June 25, 2003.

STATUS OF AMENDMENTS

Appellant filed two Responses in the above-identified application on May 28, 2002, and December 12, 2002, containing amendments to various claims and adding new claims. Appellant filed an After-Final Response on May 22, 2003, in which no claim amendments were proposed. Therefore, all amendments proposed by the Appellant have been entered. The claims involved in this Appeal are set forth in Appendix A.

SUMMARY OF THE INVENTION

1. Background

The claimed invention relates to wide-meshed geotextile gratings for providing reinforcement in civil engineering applications, such as ground layer reinforcement.

In the background section of the application, Appellant describes the problems with known polymer coatings used in textile gratings. Textile gratings known in the prior art are constructed of high strength thread groups forming a mesh structure that reinforces ground layers by penetration of the grating by the ground layers. Known coatings applied to textile gratings are relatively dense, rigid and inflexible and are utilized for the excellent resistance to rotting and weathering that is afforded by the rigid coating. However, by virtue of the rigidity and inflexibility of the coating, the grating can only be deformed to a limited extent. During installation and use of the gratings, there is a "digging in" engagement between the grating and the reinforced ground layer. The rigidity of the coating means that the only engagement between grating and reinforced ground layer results from the actual penetration of the ground layer through the mesh of the grating. Further, the rigid and relatively thin polymer coating can suffer from cracks or can partly chip off and flake away such that protection of the thread groups is adversely affected.

2. Appellant's Invention

Appellant's invention is an apparatus and method for a textile grating for reinforcing layers comprising high-strength synthetic yarn thread groups having a polymer coating containing regularly distributed gas inclusions so that the polymer coating is of a foam structure that provides an increased specific volume and compressibility to the coating. (See page 3, lines 1-11 of the present application).

Figure 2 illustrates a textile grating of high-strength yarn thread groups having a foam-like polymer coating applied thereto in accordance with the invention. The flexibility and compressibility effected by the foam-like polymer coating of the high strength yarn thread groups means that the digging-in engagement of the reinforced ground layer with the textile grating is effected not only by pieces of ground which project through the grating meshes but also by pieces of ground which produce local deformation and compression phenomena with respect to the thread groups. Further, the risk of mechanical damage to the polymer coating during installation and the risk of the polymer coating chipping and flaking off during use is reduced by virtue of the greater thickness that can be provided by the foam-like polymer coating layer and the corresponding higher degree of elasticity of the coating. (See page 3, lines 11-23 of the present application).

ISSUES

I. **Whether Claims 1-5, 9-13, and 20-23 are unpatentable under 35 U.S.C. § 103(a) over Stevenson et al. (U.S. Patent No. 6,020,275) in view of Schottenfeld (U.S. Patent No. 5,707,903).**

II. **Whether Claims 6-8, 14, 16-18 are unpatentable under 35 U.S.C. §103(a) over Stevenson in view of Schottenfeld and further in view of Sasajima (U.S. Patent No. 4,434,251).**

III. **Whether Claims 5, 7, 15 and 19 are unpatentable under 35 U.S.C. §103(a) over Stevenson in view of Dehondt (U.S. Patent No. 5,346,278).**

GROUPING OF CLAIMS

Claims 1-23 constitute one grouping, and stand or fall together.

ARGUMENT

I. **The Examiner has failed to establish a prima-facie case of obviousness under 35 U.S.C. §103(a) of Claims 1-5, 9-13, and 20-23 as being unpatentable over Stevenson in view of Schottenfeld.**

In determining whether or not there is a proper case of obviousness, it is necessary to establish whether one of ordinary skill in the art would, having the references before him, be motivated to make the proposed combination, modification or substitution. In re Lintner, 458 F.2d 1013, 1016 (CCPA, 1972). The Board has previously laid out the legal analysis for determining obviousness and the corresponding burdens faced by the examiner and the applicant as set forth below:

In rejecting claims under 35 U.S.C. §103, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner

is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir. 1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985); ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). Further, prior art references should not be combined where such combinations would render inoperable the intended purposes disclosed therein. In re Gordon, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984). These showings by the examiner are an essential part of complying with the burden presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). If that burden is met, the burden then shifts to the applicant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole. See id.; In re Hedges, 783 F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976).

A. Independent Claims 1, 5 and 20

Appellant's independent Claim 1, as amended, recites a wide-mesh textile grating for reinforcing layers. The grating includes a plurality of individual threads of high-strength synthetic yarns forming weft thread groups and warp thread groups. The weft and warp thread groups are connected together and are each at a spacing of at least 8 mm relative to the respectively adjacent parallel thread group to provide for penetration of the grating by the layers. The warp and weft thread groups are covered by a polymer coating containing regularly distributed gas inclusions so that the polymer coating is of a foam structure that provides an increased specific volume and compressibility to the coating.

Applicant's independent claim 5, as amended, recites a method of producing a textile grating for reinforcing layers in which high strength warp threads are connected together with weft threads. The warp and weft threads are connected to form warp and weft thread groups which are each at a spacing of at least 8 mm with respect to the respectively adjacent parallel thread group to provide for penetration of the grating by the layers. The thread groups are wetted with a material that is capable of flow and that contains a polymer-forming substance. The warp and weft thread groups are covered with a coating by virtue of the polymer setting. The material that is capable of flow is a propellant that produces gas inclusions during setting of the polymer that provides an increased specific volume and compressibility to the coating.

Applicant's independent claim 20, as amended, recites a method of reinforcing layers including providing a textile grating. The textile grating has a plurality of

individual threads of high-strength synthetic yarns forming weft thread groups connected to warp thread groups. The weft and warp thread groups are each at a spacing of at least 8 mm relative to the respectively adjacent parallel thread group and are covered by a polymer coating. The polymer coating contains distributed gas inclusions so that the polymer coating is of a foam structure that provides an increased specific volume and compressibility to the coating. The textile grating is installed on a first layer and is covered with a second layer.

B. Dependent Claims 2-4, 9-13 and 21-23

Claims 2-4 and 9-12 depend directly or indirectly from independent Claim 1 and include further patentable features over the base claim.

Dependent Claim 2 recites that the thread groups comprise individual yarns which are impregnated by the foam polymer coating.

Dependent Claims 3 and 9 recite that the polymer coating comprises PVC.

Dependent Claims 4 and 10 recite that the gas inclusions are of a diameter less than 1 mm. Dependent Claim 12 recites that the gas inclusions are of a diameter of less than 0.3 mm.

Claim 13 depends from independent Claim 5 and includes further patentable features over the base claim. Claim 13 recites that the warp threads and weft threads are connected together by a weaving or knitting procedure.

Claims 21-23 depend from independent Claim 20 and include further patentable features over the base claim.

Dependent Claim 21 recites that at least one of the layers is a ground layer.

Dependent Claims 22 and 23 recite that the layers penetrate the spacing between the warp and weft thread groups and deform the textile grating to frictionally interlock the layers with the textile grating.

C. The cited references cannot be validly combined because they are non-analogous art and because there has not been provided a justifiable motivation to combine them to produce Applicant's claimed invention.

The Office Action of February 25, 2003, cites the combination of Stevenson and Schottenfeld in rejecting claims 1-5, 9-13 and 20-23 under 35 U.S.C. 103(a). In stating a motivation to combine these references, the Office Action (page 3, paragraph 6) states that Schottenfeld's decorative non-slip shelf liner solves a problem common to geotextiles, such as those disclosed by Stevenson, concerning frictional engagement. For reasons set forth in detail below, Appellant respectfully submits that one of ordinary skill in the art: (1) would not look to the Schottenfeld reference to solve problems in the field

of civil engineering; (2) would not be motivated to combine these references to produce Appellant's claimed invention; and (3) could not combine these references because they contain opposing material teachings that, if combined, would defeat the intended purpose of each other.

The Stevenson reference discloses bonded composite open mesh structural textiles formed of woven textiles for use in earthwork construction applications such as earth retention systems. A plurality of warp yarns are woven with a plurality of weft yarns. A non-foam polymer coating is applied to encapsulate and bond yarns at the warp and weft junctions to strengthen the junctions. (See Figure 1 and col. 8, lines 31-57 of Stevenson).

The Schottenfeld reference discloses a decorative laminated shelf liner having a non-slip side and decorative side opposite the non-slip side. The liner is comprised of a non-slip pad having a decorative sheet covering bonded to the pad by a layer of adhesive. The non-slip pad is formed from a scrim coated with a PVC foam. (See col. 2, lines 14-19 of Schottenfeld).

As stated on page 4, beginning line 4, of the Office Action of September 12, 2002 (and referenced by the Office Action of February 25, 2003), Stevenson fails to teach that the composite open mesh structural textile is coated with foamed PVC. The Office Action combines the PVC foam coating of the decorative shelf liner disclosed by Schottenfeld with Stevenson's construction grade geotextile to produce Applicant's

claimed invention and so provide the foamed element missing from Stevenson's disclosure.

As to the first point regarding the use of Schottenfeld, one of ordinary skill in the art would not look to a shelf liner to solve problems related to civil engineering construction issues. The two technologies deal with wholly different concepts and issues. Schottenfeld suggests the use of the stated technology as a shelf or drawer lining; nothing in Schottenfeld suggests that anyone would consider using the technology so described in a civil engineering setting requiring materials of high strength and durability. Schottenfeld provides a solution to a dramatically different problem than that solved by Stevenson or Applicant's claimed invention and therefore relates to a non-analogous technology field. In other words, one of ordinary skill in the art looking to solve a problem in civil engineering construction would not look to the shelf liner of Schottenfeld.

Furthermore, concerning the motivation to combine these references, the stated reason of "frictional engagement" as justification for combining the references comes into question in view of the different frictional mechanisms utilized by Schottenfeld and Stevenson for their respective applications. Schottenfeld discloses a frictional pad that is made of a non-slip material (foamed PVC) which "resists sliding across adjacent surfaces even where the adjacent surfaces are very smooth." (See col. 2, lines 58-60 of Schottenfeld). Schottenfeld's liner further includes a sheet covering applied over open cells of his mesh for the specific purpose of ***preventing penetration*** of debris and small

objects into the cells and thereby adversely affect the non-slip capability of the decorative liner. (See col. 4, lines 10-16). In contrast, Stevenson's disclosure (like Appellant's invention) concerns frictional engagement resulting from ***penetration*** of a geotextile grating by ground layers to create a frictional interlocking of the ground layer and the geotextile for earth retention purposes.

Stevenson's structural textile is placed between ground layers and loaded with layer charges such as dirt or gravel. This is the opposite of Schottenfeld, which specifically provides for a covering to prevent any penetration of dirt and debris into the open cells of the decorative liner that would hinder the non-slip, high friction contact. Although the word "friction" is used to describe the operations in both Schottenfeld and Stevenson, Schottenfeld's disclosure is premised on the high friction contact between the smooth shelf and the non-slip pad that is made possible by ***preventing penetration*** of debris into open cells of the decorative liner by utilizing a covering, while Stevenson's operation is premised on the frictional interlock by the ***penetration*** of the ground layers through the geotextile grating. Thus, each disclosure teaches the opposite of the other with respect to the frictional engagement utilized. Accordingly, Appellant respectfully submits that the "frictional engagement" justification proposed as motivation for combining these references is not sustainable.

Furthermore, the Schottenfeld and Stevenson references contain materially opposite teachings such that combining them would destroy the operability of each disclosed device. As discussed above, Schottenfeld discloses a decorative liner with a

non-slip pad through which the high frictional contact between smooth surfaces is facilitated by a covering applied over open cells of the liner to ***prevent penetration*** into the cells by dirt and debris. Allowing penetration of dirt and debris through the open cells in a manner as described as described by Stevenson would render the Schottenfeld device inoperable for its intended purpose. The frictional contact between the pad and the smooth surface would be diminished, rendering the non-slip pad subject to unwanted slippage.

On the other hand, Stevenson's geotextile is premised on the frictional interlock rendered by the ***penetration*** of ground layer dirt and soil through the geotextile so as to stabilize the surrounding earth. Applying a covering layer over the open cells of the geotextile as described by Schottenfeld would render the Stevenson device inoperable for its intended purpose. Without the frictional interlock from the penetration of the ground layers, the charges of dirt and soil could easily move with respect to Stevenson's geotextile, rendering the geotextile ineffective. Accordingly, Applicant respectfully submits that a combination of the material teachings of these references would defeat the intended purposes of the systems disclosed in the Schottenfeld and Stevenson references and renders non-sustainable the combination of these references to produce Applicant's claimed invention.

Conclusion

Appellant respectfully submits therefore that the Examiner's rejection of Claims 1-5, 9-13 and 20-23 under 35 U.S.C. 103 as being unpatentable over Stevenson in view

of Schottenfeld is erroneous because these references cannot be validly combined to produce Appellant's claimed invention for the above-stated reasons.

Accordingly, it is requested that the Board reverse the Examiner's rejection under 35 U.S.C. 103(a).

II. The Examiner has failed to establish a prima-facie case of obviousness under 35 U.S.C. §103(a) of Claims 6-8, 14, 16-18 as being unpatentable over Stevenson in view of Schottenfeld and further in view of Sasajima.

Appellant has discussed above the legal analysis for determining obviousness under 35 U.S.C. §103(a).

A. Claims 6-8, 14, 16-18

Claims 6-8, 14, and 16-18 depend directly or indirectly from independent claim 5, and recite additional patentable features thereto. Independent claim 5 recites a method of producing a textile grating for reinforcing layers, as noted above in detail.

Dependent Claim 6 recites that the material that is capable of flow is a pasty mixture comprising PVC mixed with a plasticizer and that the textile grating is heated to a high temperature for gelling the polymer coating of PVC.

Dependent Claim 7 recites that the material which is capable of flow is formed by a polymer dispersion and that the textile grating is heated to a high temperature above 100 °C for evaporation of the water contained in the dispersion and for polymerization.

Dependent Claim 14 recites that the textile grating is heated to a temperature of 200 °C.

Dependent Claims 8, 16, 17 and 18 recite that the method includes the use of a propellant which liberates gas bubbles at a high temperature of over 100 °C.

B. The cited references cannot be validly combined because they are non-analogous art and because there has not been provided a justifiable motivation to combine them to produce Applicant's claimed invention.

The Office Action of February 25, 2003, cites the combination of Stevenson, Schottenfeld and Sasajima in rejecting claims 6-8, 14 and 16-18 under 35 U.S.C. 103(a). As discussed above, Appellant respectfully submits that one of ordinary skill in the art: (1) would not look to the Schottenfeld reference to solve problems in the field of civil engineering; (2) would not be motivated to combine these references to produce Appellant's claimed invention; and (3) could not combine these references because they contain opposing material teachings that, if combined, would defeat the intended purpose of each other.

Stevenson discloses a construction grade geotextile for an earth retention system and Schottenfeld discloses a decorative non-slip shelf liner. Sasajima discloses a method of continuously manufacturing a cross-linked PVC resin foam sheet. The Office Action of September 12, 2002 (as referenced by the Office Action of February 25, 2003), cites Sasajima as disclosing that PVC coating is formed by a polymer dispersion or made with

a plasticizer or cured at a temperature over 100 °C. (See page 5, paragraph 7 of the Office Action of September 12, 2002).

As discussed above, Appellant respectfully submits that there is no justification for or motivation to combine the construction grade geotextile of Stevenson with the decorative shelf liner of Schottenfeld to produce Appellant's claimed invention. Appellant respectfully submits that the addition of the Sasajima reference does not overcome the deficiencies of the Stevenson or Schottenfeld references with respect to Appellant's claimed invention. Furthermore, Sasajima does not provide any additional motivation that would justify the combination of the Stevenson and Schottenfeld references. Sasajima discloses a method of producing PVC foam, but does not teach or fairly suggest the utilization of such a PVC foam in the context of a construction grade geotextile for civil engineering applications.

Conclusion

Appellant respectfully submits therefore that the Examiner's rejection of Claims 6-8, 14 and 16-18 under 35 U.S.C. 103 as being unpatentable over Stevenson in view of Schottenfeld and Sasajima is erroneous because these references cannot be validly combined to produce Appellant's claimed invention for the above-stated reasons.

Accordingly, it is requested that the Board reverse the Examiner's rejection under 35 U.S.C. 103(a).

III. The Examiner has failed to establish a prima-facie case of obviousness under 35 U.S.C. §103(a) of Claims 5, 7, 15 and 19 as being unpatentable over Stevenson in view of Dehondt.

Appellant has discussed above the legal analysis for determining obviousness under 35 U.S.C. §103(a).

A. Claims 5, 7, 15 and 19

Independent claim 5 recites a method of producing a textile grating for reinforcing layers, as noted above in detail. Claims 7, 15 and 19 depend directly or indirectly from Claim 5 and recite further patentable features thereto.

Dependent Claim 7 recites that the material which is capable of flow is formed by a polymer dispersion and that the textile grating is heated to a high temperature above 100 °C for evaporation of the water contained in the dispersion and for polymerization.

Dependent Claim 15 recites that the polymer dispersion is a latex dispersion, a polyacrylic dispersion or a polyurethane dispersion.

Dependent Claim 19 recites that the method is characterized by the use of a propellant which liberates gas bubbles at a high temperature of over 100 °C.

B. The cited references cannot be validly combined because they are non-analogous art and because there has not been provided a justifiable motivation to combine them to produce Applicant's claimed invention.

The Office Action of February 25, 2003, cites the combination of Stevenson and Dehondt in rejecting claims 5, 7, 15 and 19 under 35 U.S.C. 103(a). For reasons set forth in detail below, Appellant respectfully submits that one of ordinary skill in the art: (1) would not look to the Dehondt reference to solve problems in the field of civil engineering; (2) would not be motivated to combine these references to produce Appellant's claimed invention; and (3) could not combine these references because they contain opposing material teachings that, if combined, would defeat the intended purpose of each other.

Stevenson discloses a construction grade geotextile for an earth retention system. Dehondt discloses a non-slip high chair cushion having a rubbery polymeric material deposited on a scrim fabric to prevent an infant from sliding forwardly out of the high chair. The Office Action of September 12, 2002 (as cited by the Office Action of February 25, 2003), cites Dehondt as disclosing the use of a rubber-like acrylic copolymer latex as a frictional coating and combines this frictional coating with the geotextile of Stevenson to produce Appellant's claimed invention.

Appellant respectfully submits that for similar reasons as noted above with respect to the Schottenfeld reference, the Stevenson and Dehondt references cannot be validly combined to produce Appellant's claimed invention. The Office Action combines

Stevenson's non-foamed, construction grade geotextile for civil engineering applications with Dehondt's high chair non-slip pad with a foamed polymer coating. Similar to the above-noted selection of the Schottenfeld reference, Appellant respectfully submits that it is not valid to choose any reference containing a foamed polymer coating and combine that reference with a construction grade geotextile to produce Appellant's claimed invention. One of ordinary skill in the art would not look to a high chair non-slip pad in addressing issues concerning civil engineering geotextiles in earth retention systems. The two technologies deal with wholly different concepts and issues and therefore relate to non-analogous technology fields.

Furthermore, there is no motivation to combine the high chair non-slip cushion of Dehondt with the construction grade geotextile grating of Stevenson. The Office Action of September 12, 2002, states that the high coefficient of friction of the rubber polymeric material of Dehondt provides sufficient motivation to combine the references in order to "improve Stevenson's structural textile's ability to function as a frictional interface in earth works applications." (See page 6, paragraph 8 of the September 12, 2002, Office Action). However, as in the case with the Schottenfeld reference, the dynamics of the high friction contact between the non-slip pad and the smooth chair seat are wildly different from the frictional interlock that results from ground layers ***penetrating*** through the textile grating to provide earth stabilization. Accordingly, the combination of these references premised on this "frictional engagement" justification is not a sustainable motivation.

Moreover, similar to the Schottenfeld non-slip liner, the operability of Dehondt's non-slip cushion would be arguably diminished were dirt and debris to penetrate the scrim and adversely affect the high frictional contact between the cushion and smooth high chair that is the intended purpose of the Dehondt non-slip cushion. Effective operation of the Dehondt non-slip cushion is entirely opposite to the effective operation of Stevenson's construction grade geotextile in which penetration of the geotextile by dirt and soil in ground layers is desired for the frictional interlock. Combining these references arguably defeats the intended purposes of the respective devices.

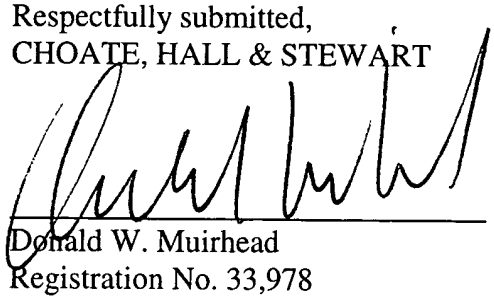
Accordingly, Applicant respectfully submits that one of ordinary skill in the art would not look to nor be motivated to combine the Dehondt and Stevenson references and that, moreover, a combination of the material teachings of these references would produce devices that defeat the intended purposes of the systems disclosed in the Dehondt and Stevenson references. For these reasons, Applicant respectfully submits that combination of these references is not sustainable.

Conclusion

Appellant respectfully submits therefore that the Examiner's rejection of Claims 5, 7, 15 and 19 under 35 U.S.C. 103 as being unpatentable over Stevenson in view of Dehondt is erroneous because these references cannot be validly combined to produce Appellant's claimed invention for the above-stated reasons.

Accordingly, it is requested that the Board reverse the Examiner's rejection under 35 U.S.C. 103(a).

Respectfully submitted,
CHOATE, HALL & STEWART



Date: August 18, 2003

Donald W. Muirhead
Registration No. 33,978

Patent Group
Choate, Hall & Stewart
Exchange Place, 53 State Street
Boston, MA 02109
(617)248-4038

APPENDIX A

The claims on Appeal are as follows:

1. (Previously presented) A wide-mesh textile grating for reinforcing layers, comprising:

a plurality of individual threads of high-strength synthetic yarns forming weft thread groups and warp thread groups, wherein said weft and warp thread groups are connected together and wherein said weft and warp thread groups are each at a spacing of at least 8 mm relative to the respectively adjacent parallel thread group to provide for penetration of the grating by the layers, and wherein the warp thread groups and the weft thread groups are covered by a polymer coating, characterised in that the polymer coating contains regularly distributed gas inclusions so that the polymer coating is of a foam structure that provides an increased specific volume and compressibility to the coating.

2. (Previously presented A textile grating according to claim 1 characterised in that the individual threads of the warp thread group and the weft thread group comprise multifilament yarns which are impregnated by the foam polymer coating.

3. (Previously presented) A textile grating according to claim 1 characterised in that the polymer coating comprises PVC.

4. (Previously presented) A textile grating according to claim 1 characterised in that the gas inclusions are of a diameter less than 1 mm.

5. (Previously presented) A method of producing a textile grating for reinforcing layers in which high-strength warp threads and weft threads are connected together in such a way that they are respectively combined together to form warp thread groups and weft thread groups which are each at a spacing of at least 8 mm with respect to the respectively adjacent parallel thread group to provide for penetration of the grating by the layers, and wherein the thread groups are then wetted with a material which is capable of flow and which contains a polymer-forming substance and wherein said warp and weft thread groups are covered with a coating by virtue of setting of the polymer, characterised in that added to the material which is capable of flow is a propellant which produces gas inclusions during setting of the polymer that provides an increased specific volume and compressibility to the coating.

6. (Previously presented) A method according to claim 5 characterised in that the material which is capable of flow is a pasty mixture comprising PVC mixed with a plasticiser and that the textile grating is heated to a high temperature for gelling the polymer coating of PVC.

7. (Previously presented) A method according to claim 5 characterised in that the material which is capable of flow is formed by a polymer dispersion, and that the textile grating is heated to a high temperature above 100°C for evaporation of the water contained in the dispersion and for polymerisation.

8. (Previously presented) A method according to claim 5 characterised by the use of a propellant which liberates gas bubbles at a high temperature of over 100°C.

9. (Previously presented) A textile grating according to claim 2 characterized in that the polymer coating comprises PVC.

10. (Previously presented) A textile grating according to claim 9 characterized in that the gas inclusions are of a diameter of less than 1 mm.

11. (Previously presented) A textile grating according to claim 1 characterized in that the gas inclusions are of a diameter of less than 0.3 mm.

12. (Previously presented) A textile grating according to claim 9 characterized in that the gas inclusions are of a diameter of less than 0.3 mm.

13. (Previously presented) A method of producing a textile grating according to claim 5, wherein said warp threads and said weft threads are connected together by a weaving or knitting procedure.

14. (Previously presented) A method of producing a textile grating according to claim 6, wherein the textile grating is 200°C.

15. (Previously presented) A method of producing a textile grating according to claim 7, wherein the polymer dispersion is a latex dispersion, a polyacrylic dispersion, or a polyurethane dispersion.

16. (Previously presented) A method according to claim 6 characterized by the use of a propellant which liberates gas bubbles at a high temperature of over 100°C.

17. (Previously presented) A method according to claim 7 characterized by the use of a propellant which liberates gas bubbles at a high temperature of over 100°C.

18. (Previously presented) A method according to claim 14 characterized by the use of a propellant which liberates gas bubbles at a high temperature of over 100°C.

19. (Previously presented) A method according to claim 15 characterized by the use of a propellant which liberates gas bubbles at a high temperature of over 100°C.

20. (Previously presented) A method of reinforcing layers, comprising:

providing a textile grating having a plurality of individual threads of high-strength synthetic yarns forming weft thread groups connected to warp thread groups, wherein said weft and warp thread groups are each at a spacing of at least 8 mm relative to the respectively adjacent parallel thread group, and wherein the warp thread groups and the weft thread groups are covered by a polymer coating, containing regularly distributed gas inclusions so that the polymer coating is of a foam structure that provides an increased specific volume and compressibility to the coating;

installing a textile grating on a first layer; and

covering the textile grating with a second layer.

21. (Previously presented) A method according to claim 20, wherein at least one of the layers is a ground layer.

22. (Previously presented) A method according to claim 20, wherein the layers penetrate the spacing between the warp and weft thread groups and deform the textile grating to frictionally interlock the layers with the textile grating.

23. (Previously presented) A method according to claim 21, wherein the layers penetrate the spacing between the warp and weft thread groups and deform the textile grating to frictionally interlock the layers with the textile grating.